

Web Analytics - 6-110-13A.H2019

H2019

J01

Presentation

Description

Enhance our understanding of Internet data and of the tools and methods used to analyze this data in order to make strategic decisions relating to an organization's Internet activities.

This course focuses on the unique items of Internet data, especially as pertains to data (e.g.: website traffic data), metrics (e.g.: shopping cart abandonment rate), and software (e.g.: Google Analytics).

Themes

Website Traffic Metrics

Company Presentation & Case Study

Visitor Conversion

Attracting Visitors

Segmentation of Web Data

Qualitative Methods and Tech3Lab Presentation

Data Collection-Mandate - in field with users

Using Experiments to Optimize Websites

Using Dashboards

Clickstream Data Analysis, Retention and Social Media Measurement

Objectives

The main objective of the course is to enhance students' understanding of Internet data and the tools and methods used to analyze this data in order to help them make strategic decisions relating to an organization's Internet activities. The course is divided into three main sections that describe, in order of priority, the tasks of an online retail manager which are:

- 1) attracting visitors to the site
- 2) converting visitors into buyers
- 3) securing visitor loyalty

Learning Strategy

The course includes lectures, discussions and assignments based on Internet data. Throughout the term, students will have to complete 3 individual assignments, 2 quizzes and 1 group assignment. The group

assignment consists in developing an action plan for a company that will have presented its situation and data in class.

The individual assignments consist in putting into practice the various theoretical concepts covered in one or many classes. These concepts will be applied in concrete situations (often, therefore, complex) that reflect the reality of the company environment. This will bring students to reflect on how to adequately put these concepts into practice.

Contact Information

Coordinator

Gary Gebhardt
Associate Professor
Email: gary.gebhardt@hec.ca
Phone Number: 514-340-6868
Office: CSC-04.507

Secretary(ies)

Céline Jorge
Secretary
Email: celine.jorge@hec.ca
Phone Number: 514-340-6427
Office: CSC-04.715

Learning Material

Bibliographic Resources

IMPORTANT

Kaushik, Avinash (2010) . «Web analytics 2.0 the art of online accountability & science of customer centricity» , Hoboken, N.J. , Wiley

ISSN: 0470529393

, https://elib.hec.ca/uhtbin/cgiirsi/x/0/0/5?srchfield1=GENERAL^SUJET^SUJETS^mot_cl%C3%A9&searchdata1=317251{909}

[Book]

[Other link](#)

IMPORTANT

[The Big Book of Key Performance Indicator by Eric Peterson](#)

IMPORTANT

[Web Analytics Definitions](#)

Complementary Bibliographical Resources

[Blogue: Occam's Razor by Avubasg Kaushik \[...\]](#)

[Perterson E. \(2004\), Web Analytics Demystified.](#)

Kaushik, A. (2007) . «**Web Analytics : An Hour a Day**»
[Book]

[Always be testing : The Complete Guide to Google Website Optimizer](#)

Evaluations

IMPORTANT

Your main duty: attending class

According to the [School's rules](#), students are expected to attend classes (or course activities). Instructors are not required to provide any additional help or adapt courses or evaluations due to a student's absence.

Intellectual integrity: everybody wins!

Note that any evaluation may be run through software analysis to detect similarities. Find out how to avoid plagiarism and be careful when working on group assignments and co-operating with other students outside the classroom. [For more information on intellectual integrity.](#)

Exams: things to check before the big day

1. Make sure your student card is valid. [For more information](#)
2. Check the exam time and location on [HEC en ligne](#).
3. Find out what materials you are allowed to bring into the exam, on your [course's site](#).
4. Is your calculator the approved type? [For more information...](#)

1 - 2 Quizzes (30%) (30%)

Location: In class

Submission: Paper / Electronic

Term: Written

Work Mode: Individual

Description

Sessions 5 & 10

2 - 3 Assignments (individual) (30%) (30%)

Location: In class / At home

Submission: Paper / Electronic

Term: Oral / Written

Work Mode: Individual

Description

Three individual assignments are to be completed, each one counting for 10. These will be handed out in class and will have to be handed back two classes later at the beginning of class.

3 - Term Assignment (group) (40%) (40%)

Location: In class / At home

Submission: Paper / Electronic

Term: Oral / Written

Work Mode: Team

Description

The groups must be made up of 5 students. The term assignment is in three parts, with each part to be handed in separately. The first part of the term assignment is the analysis report (20%). The other 2 parts are the practice presentation (10%) during session 12 and the final presentation to the client (10%) during session 13. Each group will have to present their report to the professor in class 12 prior to do a final presentation in class 13. The total length of the presentation is 15 minutes. The presentation schedule will be handed out to students during the term.

Tardiness

In this course, a student who hand in an assignment or a term assignment after the deadline will receive a penalty of 10% per day.

[Café Barista Presentation HEC - EN - DEF.pdf](#)

(Presentation HEC - EN - DEF.pdf)

[Th3rd Wave Coffee](#) [Website]

Café Barista does not have a list of competitors, but here is a list of coffee vendors in Montréal.

Also, here is a link for another competitor that Hugo Lamarre (the professor from the French classes) suggested: <https://dispatchcoffee.ca>

[B2B Client List](#)

Here is a list of the retailers/coffee shops that carry Café Barista coffee.

Course Organisation

1 - Introduction

Description

- Presentation of course outline
- What is Web Analytics?
- Why is it important for organizations?
- Web data collection sources and methods
- Web Analytics solutions (e.g.: Google Analytics)

Activities/Resources before session

IMPORTANT

Kaushik, Avinash (2010) . «Web analytics 2.0 the art of online accountability & science of customer centricity» , Hoboken, N.J. , Wiley

ISSN: 0470529393

, https://elib.hec.ca/uhtbin/cgisirsi/x/0/0/5?srchfield1=GENERAL^SUJET^SUJETS^mot_cl%C3%A9&searchdata1=317251{909}

[Book]

Chapters 1-2 & 8

IMPORTANT

E. Peterson (2004) . «Web Analytics Demystified»

[Book]

Chapters 2 & 3

Activities/Resources during session

[Introductory Slides for Web Analytics in English](#)

(S1_611013A_WA_Intro_English.pptx)

Introductory Slides for Web Analytics in English

2 - Website Traffic Metrics

Description

- Website traffic metrics and key indicators (audience)
- Visitors vs visits (sessions)
- Unique or returning visitors
- Pages visited
- Session duration
- Bounce rate
- Introduction to the use of Google Analytics

Assignment 1: Basic metrics - Google demo account (deadline in 2 weeks, at beginning of session 4)

IMPORTANT

Kaushik, Avinash (2010) . «Web analytics 2.0 the art of online accountability & science of customer centricity» , Hoboken, N.J. , Wiley

ISSN: 0470529393

, https://elib.hec.ca/uhtbin/cgisirsi/x/0/0/5?srchfield1=GENERAL^SUJET^SUJETS^mot_cl%C3%A9&searchdata1=317251{909}

[Book]

Chapter 3

Activities/Resources before session

IMPORTANT

[The Big Book of Key Performance Indicators by Eric Peterson](#)

Chapter 2 & 3

[\(2008\). «Web Analytics Definitions»](#)

Activities/Resources during session

IMPORTANT

[Audience Traffic Analysis](#)

(S2_611011_Traffic Analysis - Achalandage Audience-English.pptx)

[Google tutorial and in-class exercises](#)

(S2_Traffic Analysis - tutorial - English.pptx)

Activities/Resources after session

IMPORTANT

[Instructional Guide: Audience Report on Google Analytics \(GA\)](#)

(Séance2-RapportAudienceGA-DocumentPédago.LT_A_EN_V1.docx)

This guide (in English) will take you through the exercises that we did in Session 2.

3 - Company Presentation & Case Study

Description

Presentation of mandate for Café Barista <https://cafebarista.ca/en/>

Speaker: Representatives from Café Barista

Activities/Resources during session

IMPORTANT

[Web Analytics at Quality Alloys, Inc., by Rob Weitz, David Rosenthal](#) [Case]

IMPORTANT

[Data \(in Excel\) for Web Analytics at Quality Alloys, Inc.](#)

(CU46-XLS-ENG.xls)

Miscellaneous Resources

IMPORTANT

[Presentation HEC - EN - DEF.pdf](#)

4 - Visitor Conversion

Description

Assignment 1 Due at beginning of class

- Website visitor conversion
- Organization and site objectives
- Conversions (micro and macro)
- Website performance metrics and key indicators
- Conversion channels
- Attribution models
- In Class Exercise: Conversion

Activities/Resources before session

IMPORTANT

Kaushik, Avinash (2010) . «Web analytics 2.0 the art of online accountability & science of customer centricity» , Hoboken, N.J. , Wiley

ISSN: 0470529393

, https://elib.hec.ca/uhtbin/cgiisirs/x/0/0/5?srchfield1=GENERAL^SUJET^SUJETS^mot_cl%C3%A9&searchdata1=317251{909}

[Book]

Chapter 5

[The Big Book of Key Performance Indicators by Eric Peterson](#)

Chapter 4

Activities/Resources during session

[S4_611011_Conversion_e_pour_English.pptx](#)

(S4_611011_Conversion_e_pour_English.pptx)

Here are the slides for Session 4.

Activities/Resources after session

IMPORTANT

[DocumentPédagogique -Conversion.LT_A_ENG_V1.docx](#)

(DocumentPédagogique -Conversion.LT_A_ENG_V1.docx)

This is the pedagogical document for Session 4 - showing an overview of goals and conversions, as well as the detailed solutions for the exercises that we did in class.

5 - Attracting Visitors

Description

Quiz 1: Quiz on the use of Google Analytics

- Analysis of traffic sources
- Email
- Navigators
- Banners
- Social media
- In Class Exercise: Traffic Sources

Assignment 2: Performance analysis of the website *Café Barista* (deadline class 7)

Activities/Resources before session

IMPORTANT

Kaushik, Avinash (2010) . «Web analytics 2.0 the art of online accountability & science of customer centricity» , Hoboken, N.J. , Wiley

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Chapter 4

Activities/Resources during session

[Slides for Session 5: Acquisition](#)

(S5_611011_Acquisition_English_Gebhardt.pptx)

Activities/Resources after session

IMPORTANT

[Solution for Acquisition Exercise at end of Session 5](#)

(Exercice_S05-acquisition_solution_ENGLISH_V01.pptx)

6 - Segmentation of Web Data

Description

- Usefulness of web data segmentation
- Available segmentation databases

- Segmentation techniques
- Marketing repercussions of segmentation
- In Class Exercise: Segmentation

Activities/Resources before session

IMPORTANT

Kaushik, Avinash (2010) . «Web analytics 2.0 the art of online accountability & science of customer centricity» , Hoboken, N.J. , Wiley

ISSN: 0470529393

, https://elib.hec.ca/uhtbin/cgiisirs/x/0/0/5?srchfield1=GENERAL^SUJET^SUJETS^mot_cl%C3%A9&searchdata1=317251{909}

[Book]

Chapter 4

Activities/Resources during session

[S6_611011_Segmentation_English_Gebhardt.pptx](#)

(S6_611011_Segmentation_English_Gebhardt.pptx)

Slide for Session 6 - Segmentation

Activities/Resources after session

IMPORTANT

[Solution for Segmentation Exercise at end of Session 06](#)

(Exercise Segmentation Session 06 English_Gebhardt.docx)

7 - Qualitative Methods and Tech3Lab Presentation

Description

Assignment 2 Due at beginning of class

- Introduction to other complementary methods of measurement
- Introduction to eye-tracking and analysis of facial expressions
- Card sorting
- Fieldwork with users to understand user experience

Assignment 3: Fieldwork with users to evaluate UX of *Café Barista* (deadline class 9)

Activities/Resources during session

[Tech3 Lab Presentation](#)

(WA_Hiver2019_v2.pdf)

[Session 7: UX and other methods of interaction analysis](#)

(S7_UX_et_autres_methods-GFGebhardt-English v02.pptx)

8 - Data Collection-Mandate – in field with users

Description

Fieldwork with users to evaluation the user experience of the Café Barista website for Assignment 3/UX

9 - Using Experiments to Optimize Websites

Description

Assignment 3 Due at beginning of class

- Online tests and experiments
- Website usability criteria

Exercise: Test A/B on a site of your choice

Activities/Resources before session

IMPORTANT

Kaushik, Avinash (2010) . «Web analytics 2.0 the art of online accountability & science of customer centricity» , Hoboken, N.J. , Wiley

ISSN: 0470529393

, https://elib.hec.ca/uhtbin/cgiisirs/x/0/0/5?srchfield1=GENERAL^SUJET^SUJETS^mot_c1%C3%A9&searchdata1=317251{909}

[Book]

Chapter 7

[Critères ergonomiques pour l'évaluation d'interfaces utilisateurs](#) [Article]

Activities/Resources during session

[Slides for Session 9 - Experimentation and A/B Testing](#)

(S9_611011_Session 9-Exerimenting and AB testing_English.pptx)

[The Lift Model - white paper from WiderFunnel](#)

(TheLiftModel.pdf)

[The Big Book of Experimentation, case studies from Optimizely](#)

(Case_Study_The_Big_Book_of_Experimentation.pdf)

10 - Using Dashboards

Description

Quiz 2: Quiz 2 on the use of Google Analytics and Web Analytics in General

- Google Data Study
- Communication objectives
- Choice of key indicators
- Presentation formats
- Exercise: Engagement Measurements

IMPORTANT

[The Big Book of Key Performance Indicators by Eric Peterson](#)

Chapter 4

Activities/Resources during session

[Session 10 PowerPoint Slides - Dashboards](#)

(S10_6111011_Session 10_Dashboards_English_Gebhardt v01.pptx)

[PDF of "Good enough to Great" from Tableau Software](#)

(goodenoughtogreat.pdf)

Activities/Resources after session

[Custom Reports and Dashboard creation on Google Analytics](#)

(Custom Reports and Dashboard creation on GA_English.docx)

11 - Clickstream Data Analysis, Retention and Social Media Measurement

Description

- Presentation of key concepts
- Path analysis techniques applied to web data
- Longitudinal analysis of website visits
- Recency and latency

- Social media measurement

Activities/Resources before session

J. Hauser, G. Urban, G. Liberali, M. Braun (2009) . «Website Morphing» , *Marketing Science* , vol. 28 , no. 2
[Article]

Pawel J Kalczynski (2006-04-01) . «Predicting On-Line Task Completion with Clickstream Complexity Measures: A Graph-Based Approach» , *International Journal of Electronic Commerce* , vol. 10 , no. 3
ISSN: 1086-4415
[]

Activities/Resources during session

[Session 11 - Loyalty](#)
(S11_611011_Loyalty_English.pptx)

12 - Preliminary Presentation of Action Plans

Description

This presentation will be done in teams in front of the professor (without the rest of the class).

13 - Final Presentation of Action Plan

Description

This presentation will be done in front of the company representatives, the professor and the students.